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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/923,369	09/03/1997	SHIGEAKI KOIKE	SONY-C5757	2545
29175	7590	11/30/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			BOCCIO, VINCENT F	
		ART UNIT	PAPER NUMBER	
		2616		

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	08/923,369	KOIKE ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Vincent F. Boccio	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on RCE and Amendment of 10/5/04.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 31-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 31-36 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. 08/563,188.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

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**DETAILED ACTION**

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claim 31, 32, 35, 36, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (US 5,164,839) in view of Radice (US 5,475,498).

Regarding claims 31 and 35, Lang discloses and meets the limitations associated with a data R & R, apparatus comprising:

- disc/disk R & R means (Fig. 2, "13", col. 6, disc, being one of magnetic or optical);

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- tape R & R (Fig. 2, col. 3, media 23, VCR ... magnetic tape);
- a first I/O means which receives an analog from an outside apparatus (video line or camera input 15 or Tv tuner 16), converting to digital (A/D 24), of a digital format (all signals once processed have a format, considered to be met), outputting to the transfer means (met by routing to desired port or device Fig. 4, in the digital format established by the A/D and/or compression element 72 to any location or port desired, Fig. 2), converting back to analog (D/A 25);
- a second I/O means receiving A/V data from a communication line connected to an outside apparatus (a device that provides data, from an input as shown, comes from some sort of device being the/a outside device, apparatus or system), the I/O (met by one of "18, Fiber Optic I/O", and/or "22 A/V Trans/Rec.", etc.....);
- a data transfer means (reference transfer elements, which allow for transfer between various points/devices/inputs/outputs, in the unit of Fig. 1, as shown in, Fig. 4, Fig. 2, Fig. 3 etc.....),
  - wherein the transfer means, transferring audio and/or video among any of the elements selected from the disc, tape and the first and second I/O means.

Lang discloses as interpreted by the examiner is deemed to meet all recited limitations including buffering (col. 9, compression process buffering using RAM 29), but,

Lang fails to disclose input and output buffering means to and from the disc/disk, having a control means which controls reproduction with respect to capacities of the input and output buffers.

Radice teaches buffering input and output (buffer or memory 36), with respect to a digital R/R unit and a controller for controlling {controller 50} the buffering (recording or reproduction), thereby during

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both of the mentioned modes controlling buffer fullness based on capacities of the buffer in reproduction or recording operations (col. 3, lines 11-25, col. 5 line 32, to col. 6, line 60), as taught by Radice.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Lang by incorporating buffering into the transfer means of Lang in order to control recording or reproduction of video and audio while controlling buffering, thereby preventing the buffer from underflow or overflowing conditions, as taught by Radice.

Claim 32 is met by the combination as applied, which provides for functions or modes as recited:

- from disc to tape;
- from tape to disc;
- disc to first or second I/O;
- from either I/O to disc or tape (reference Fig. 4, etc.....).

Regarding claim 36, the combination as applied fails to address the limitation of having means for serial to parallel and parallel to serial data conversions to and from an outside apparatus thru a communication line.

Radice further teaches in Fig. 2, providing an interface having S/P 30 and P/S 48 conversion elements, thru communication lines (serial data in 10 & serial data out 20 w/clocks), thereby converting the signals into a form for processing (32 and 46 etc.....), "a signal to record" or "a signal to reproduce", to and from the digital R/R unit, as taught by Radice.

Therefore, it would have been obvious to those skilled in the art at the time of the invention to modify the combination by providing S/P & P/S, as taught by Radice.

3. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lang (5,164,839) and Radice (5,475,498), as applied above and further in view of Honjo (US 5,432,769).

Regarding claim 33, Radice teaches buffering but, fails to particularly disclose the recited operational condition, wherein upon the buffer capacity reaches a

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predetermined value, reproduction to the buffer stops, thereby not overflowing or overwriting, the buffer.

Honjo teaches performing a stop operation upon buffer reaching a predetermined capacity (col.4, lines 27-, "reproduction ... amount of data Z remains in the buffer circuit 11, the reproduction is stopped ... becomes smaller ... the reproduction is carried out ... intermittent feeding manner"), thereby controlling buffer capacity and stopping upon the predetermined capacity, as taught by Honjo, thereby not overflowing or overwriting the buffer.

Therefore, it would have been obvious to stop reproduction operations when buffer capacity reaches a predetermined limit or value as taught by Honjo.

Claim 34 is also met wherein the tape reproduces to the buffer at its rate, wherein the buffer records at the rate presented or the tape rate.

***Response to Arguments***

1. Applicant's arguments with respect to canceling all existing claims and presenting new claims 31-36 have been considered but are moot in view of the new ground(s) of rejection.

**Contact Fax Information**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communication intended for entry)

or:

(703) 308-5359, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Monday-Thursday, 8:00 AM to 5:00 PM Vincent F. Boccio (703) 306-3022.

Any inquiry of a general nature or relating to the status of this application should be directed to Customer Service (703) 306-0377.

Primary Examiner, Boccio, Vincent  
11/26/04

  
VINCENT BOCCIO  
PRIMARY EXAMINER